

From the INTERNATIONAL SEARCHING AUTHORITY

To: LEE, Young-Pil	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION (PCT Rule 44.1)							
The Cheonghwa Building, 1571-18 Seocho-dong, Seocho-gu Seoul 137-874, Republic of KOREA JUL 1 4 2003								
RECEIVED	Date of mailing (day/month/year) 07 JULY 2003 (07.07.2003)							
Applicant's or agent's file reference SH-18948-PCT	FOR FURTHER ACTION See paragraphs 1 and 4 below							
International application No. PCT/KR03/00625	Intrenational filing date (day/month/year) 28 MARCH 2003 (28.03.2003)							
Applicant SAMSUNG ELECTRONICS CO., LTD. et al								
1. The applicant is hereby notified that the international search report has been established and is transmitted herewith. Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46): When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report. Where? Directly to the International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland								
Facsilime No.: (41-22) 740.14.35 For more detailed instructions, see the notes on the accompanying sheet. 2. The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.								
With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that: the protest together with the decision theron has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision theron to the designated Offices. no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.								
4. Reminders	applicant will be notified as soon as a decision is made.							
applicant wishes to avoid or postpone publication, a notice of w nust reach the International Bureau as provided in Rules 90bis. preparations for international publication. Within 19 months from the priority date, but only in respect of examination must be filed if the applicant wishes to postpone the	l application will be published by the International Bureau. If the rithdrawal of the international application, or of the priority claim, I and 90bis.3, respectively, before the completion of the technical some designated Offices, a demand for international preliminary to the national phase until 30 months from the priority within 20 months from the priority date, perform the prescribed							
In respect of other designated Offices, the time limit of 30 months	fices. ths(or later) will apply even if no demand is filed within 19 months.							
See the Annex to Form PCT/IB/301 and, for details about the a Guide, Volume II, National Chapters and the WIPO Internet site	pplicable time limits, Office by Office, see the PCT Applicant's							
Name and mailing address of the ISA/KR	Authorized officer							

Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

COMMISSIONER

Telephone No. 82-42-481-5208



2004



INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	see Notification of	Transmittal of International Search Report						
SH-18948-PCT	ACTION	(Form PCT/ISA/22	20) as well as, where applicable, item 5 below.						
International application No.	International filing date		(Earliest) Priority Date (day/month/year)						
PCT/KR03/00625	28 MARCH 2003 (2)	8.03.2003)	28 MARCH 2002 (28.03.2002)						
Applicant									
SAMSUNG ELECTRONICS CO., LT	D. et al								
This International search report has been prep to Article 18. A copy is being transmitted to		l Searching Authority	y and is transmitted to the applicant according						
This international search report consists of a It is also accompanied by a co		eets. nent cited in this reno	rt.						
	F,								
language in which it was filed, unle	ess otherwise indicated und	der this item.	of the international application in the						
the international search was car Authority (Rule 23.1(b)).	ried out on the basis of a	translation of the inte	rnational application furnished to this						
		disclosed in the inter	rnational application, the international search						
contained in the international a	application in written form	1.							
filed together with the internat	ional application in compr	uter readable form.							
furnished subsequently to this	Authority in written form								
furnished subsequently to this		•							
the statement that the subseque international application as file		quence listing does no	ot go beyond the disclosure in the						
the statement that the informat furnished.	ion recorded in computer	readable form is iden	tical to the written sequence listing has been						
2. Certain claims were found un	isearchable (See Box I).								
3. Unity of invention is lacking	Unity of invention is lacking (See Box II).								
4. With regard to the title,									
X the text is approved as submitted	The text is approved as submitted by the applicant.								
the text has been established by	this Authority to read as	s follows:							
5. With regard to the abstract,									
the text is approved as submitted	ed by the applicant.								
the text has been established, as	ccording to Rule 38.2(b),	by this Authority as i	it appears in Box III. The applicant may,						
	within one month from the date of mailing of this international search report, submit comments to this Authority.								
6. The figure of the drawing to be publ	lished with the abstract is	Figure No.	4						
as suggested by the applicant.			None of the figures.						
because the applicant failed to	suggest a figure.								
because this figure better chara	cterizes the invention.								

. CLASSIFICATION OF SUBJECT MATTER

IPC7 G11B 7/24, G11B 7/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched KR, JP: IPC as above.

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used) "recording", "medium", "absorption", "dielectric", "layer", "diffusion", "magnetic", "spin", "direction"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
(X)	JP 11-066611 A (TDK CORP.) 9 MARCH 1999 See the claims	1, 23, 45	
(X)	JP 10-293942 A (NEC CORP.) 4 NOVEMBER 1998 See the whole document	1, 2, 4, 23, 24, 26, 45, 46, 48	
Y	See [0006] of the document	3, 25, 47	
Y	WO 98/38636 (ASAHI KASEI KOGYO LTD.) 3 SEPTEMBER 1998 See page 3. line 13 - page 4. line 2	1, 23, 45	
$\left(\begin{array}{c} x \\ \end{array} \right)$	KR P1998-025025 A (SHARP LTD.) 6 JULY 1998 See the whole document	9, 11, 12, 13, 31, 33, 34, 35, 53, 55, 56, 57	
Y	US 5,777,953 A (SHARP LTD.) 7 JULY 1998 See the whole document	9, 11, 12, 13, 31, 33, 34, 35, 53, 55, 56, 57	
Y	WO 2001/93259 (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.) 6 DECEMBER 2001 See the whole document	15, 59	

	Fu.	rther	documents	are	listed	ın	the	continuation	01	Box	C.
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See patent family annex.

- * Special categories of cited documents:
- 'A" document defining the general state of the art which is not considered to be of particular relevance
- 'E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- O" document referring to an oral disclosure, use, exhibition or other means
- 'P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

03 JULY 2003 (03.07.2003)

Date of mailing of the international search report

03 JULY 2003 (03.07.2003)

Name and mailing address of the ISA/KR



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